

PTO/SB/01 (12-97)
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Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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DECLARATION FOR UTILITY OR				Attorney Docket Numb r 20434-718			
		DESIG	* =	First Named Inventor	Islam		
PATENT APPLICATION				COMPLETE IF KNOWN			
	(3	7 CFR	1.63)	Application Number	09/550,730		
	Declaration Submitted	itted Submitted after Initial		Filing Date	April 17, 2000		
	with Initial Filing	OR	Filing (surcharge (37 CFR 1.16(e))	Group Art Unit	2874		
	required)		Examiner Name	Not assigned			

		_ AL _ A				-			
As a below named Invento	•								
'''	My residence, post office address, and citizenship are as stated below next to my name.								
I believe I am the original names are listed below) of	, first and sole inve f the subject matter	entor (if only one name r which is claimed and f	is listed below) for which a pater	or an original nt is sought on	, first and joint invention entit	entor (if plural tled:			
BROADBA	ND SAGNA	C RAMAN AMI	PLIFIERS	AND CAS	SCADE LAS	ERS			
		(Title of the I	nvention)						
the specification of which is attached hereto OR	ı								
was filed on (MM/I] (********	04/17/2000	as United	States Applica	ation Number or P	CT International			
Application Number 09/550,	,730 and was am	ended on (MM/DD/YYY	Υ) (if a	pplicable).					
I hereby state that I have			of the above id	dentified spec	ification, including	the claims, as			
amended by any amendmen	•								
I acknowledge the duty to dis	sclose information	which is material to pat	entability as def	ined in 37 CFF	R 1.56.				
I hereby claim foreign priori certificate, or 365(a) of any America, listed below and he or of any PCT international a	PCT internationa ave also identified	al application which des below, by checking the a filing date before that	signated at lease box, any foreig of the applicatio	st one country in application in on which pri	other than the L for patent or inver ority is claimed.	Inited States of ntor's certificate,			
Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Prior Not Cla		Certified Cop YES	y Attached? NO			
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.						_			
				l					
☐ Additional foreign applica	ation numbers are	listed on a supplementa	al priority data sh	neet PTO/SB/0	28 attached heret	o:			
I hereby claim the benefit un				lication(s) liste	ed below.				
Application Number	(s)	Filing Date (MM/DD	MYYY)	numb supp	ional provisional a pers are listed on a lemental priority da 'SB/028 attached h	ı ata sheet			

(Page 1 of 2)

Burden Hour Statement: This form is estimated to take 0.4 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.





P! ase Type a plus sign (+) inside this box

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DECLARATION — Utility or Design Pat nt Application

I hereby claim the benefit under 35 U.S.C. 120 of any United States application(s), or 365(c) of any PCT international application designating the United States of America, listed below and, insofar as the subject matter of each of the claims of the application is not designated in the prior United States or PCT international application in the manner provided by the first paragraph of 31 U.S.C. 112. I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

I acknowledge the between the filing	duty to	disclose informathe prior application	ition whi	ich is m he natio	aterial tonal or P	o pate PCT in	entabilit nternatio	y as c	iefined	in 37 C of this	FR 1.56 v	vhich b	ecame available
U.S. Parent Application or PCT Parent Number					F	Parent Filing Date F (MM/DD/YYYY)		Pa	Parent Patent Number (if applicable)				
09/110,696		·						C	07/07/9	8			
08/773,482								1	12/23/9	6			
							İ						
Additional U.S.	or PCT	international applic	cation nu	ımbers a	are listed	on a	supplem	ental	priority	data she	et PTO/SB	/028 att	tached hereto.
As a named inventor	or, I her	eby appoint the fol	lowing re	egistered		oner(s	s) to pro					insact a	
				OR									Code Label here
				XI Regi: egistra		ractitio	oner(s) n	ame/n	egistrat	on numb	er listed b		Registration
	lame			Numbe					Name	•			Number
Paul Davis				29,294	•	[David W	eitz				38,362	
John Bruckner				35,816	5	E	Barbara	Court	ney			42,442	
Richard Gregory			42,607 V			/an Mal	named	di			42,828		
Shaleish Mehra				44,834	<u> </u>		Stephen	Warh	ola			43,237	
Additional regist	tered pr	actitioner(s) named	l on supp	plementa	ai Regist	ered f	Practition	er Info	ormatio	n sheet F	PTO/SB/02	C attac	hed hereto.
Direct all correspo	ondenc		er Numb Code La						7 (OR 🖾 (Correspon	dence	address below
Name	Paul	Davis					•						
Address	Wilso	n Sonsini Goodrich & Rosati											
Address	650 F	age Mill Road			.				_جه_				
City	Palo /	Alto			.,		State	C	CA	ZIP	94304		
Country	U.S.	Telephone 650-493-			493-9	300			Fax	650-493	6811		
I hereby declare the believed to be true; punishable by fine a pplication or any pa	and ful or impri	ther that these sta sonment, or both,	itements	were m	nade with	the I	knowled	ge tha	ıt willful	false sta	atements a	nd the	like so made are
Name of Sole	or Fir	st Inventor:				A pe	etition h	as be	en file	d for th	is unsign	ed inve	entor
Given	Name	(first and middle	(if any)		Family Name or Surname							
Mohammed N.					$\overline{}$			isi	am				
Inventor's Signat	ure	Moh	ins		M.	Ju	lan	2			Date		
Residence: City Allen		Sta	ite	тх				US	Citizen	ship	us		
Post Office Address 907 Twin Creek		ks Drive	•										
Post Office Addre	ss												
City		Allen	Sta	ite	TX		ZIP		750)13	C untr	y	US
☐ Additional inve	ntors ar	e being named or	n the	sup	plement	tal Ad	ditional	Inven	tor(s) s	heet(s)	PTO/SB/0	2A atta	ched hereto:





POWER OF ATTORNEY BY ASSIGNEE TO EXCLUSION OF INVENTOR UNDER 37 C.F.R. § 3.71 WITH REVOCATION OF PRIOR POWERS

ָ ר ר	d ASSIGNEE of the						
_		<u>09/550,730</u> , filed on <u>A</u> eys of Wilson Sonsini (
Attorney Name Reg. No. Attorney Name Reg. No							
Paul Davis		29,294	John J. Bruckner	35,816			
David J. Abral		39,554	David J. Weitz		38,362		
George A. Wil	llman	41,378	U.P. Peter Eng	39,666			
Jinntung Su		42,174	Barbara J. Courtney 42,442				
Richard L. Gre Stephen Warh		42,607 43,237	Van Mahamedi Chen, Shirley		42,828		
Shaliesh Mehr		44,934	Chen, Shirley		44,608		
\boxtimes		•		been (or is her	ewith) forwarded to the		
	the Assignment rec	corded on at reel _	, frames				
hereby certifies		SSIGNEE's knowledge			ts have been reviewed and SSIGNEE.		
Name	Paul Davis						
Address	Wilson Sonsini	Goodrich and Rosati					
Address	650 Page Mill I	Road		· · · · · · · · · · · · · · · · · · ·			
City	Palo Alto	State	CA	Zip	94304		
Country	USA	Telephone	(650) 493-9300	Fax	(650) 493-6811		
			ASSIGNEE: XTER	RA COMMUNI	CATIONS, INC.		
					M. Theus		

Mohammed Islam, Chairman

Date: 7/25/00





PTO/SB/15 (8-96)
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Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
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ASSIGNMENT OF APPLICATION

Docket Number 20434-718

Whereas, the undersigned:	
 ISLAM, Mohammed N. 907 Twin Creeks Drive Allen, TX 75013 	
hereinafter termed "Inventors", have invented certain new and	useful improvements in
BROADBAND SAGNAC F	RAMAN AMPLIFIERS AND CASCADE LASERS
☐ for which an application for United States Pater ☐ for which an application for a United States Pater	nt was filed on April 17, 2000, Application No. 09/550,730 tent was executed on, and
(hereinafter termed "Assignee"), is desirous of acquiring the e	ng a place of business at <u>5800 Granite Parkway</u> , <u>Suite 300</u> , <u>Plano</u> , <u>TX 75024</u> , entire right, title and interest in and to said application and the invention disclosed of or conceived, made or discovered jointly or severally by said Inventors (all o any and all patents, inventor's certificates and other forms of protection (hereinafter eign countries.
NOW, THEREFORE, in consideration of good and from said Assignee:	i valuable consideration acknowledged by said Inventors to have been received in full
application and said invention; (b) in and to all rights to apply Protection of Industrial Property or otherwise; (c) in and to an United States or any foreign country, including each and ever	insfer and convey unto said Assignee the entire right, title and interest (a) in and to said or for foreign patents on said invention pursuant to the International Convention for the many and all applications filed and any and all patents granted on said invention in the yapplication filed and each and every patent granted on any application which is a of any of said applications; and (d) in and to each and every reissue or extensions of
enjoy to the fullest extent the right, title and interest herein co shall include prompt production of pertinent facts and docume other papers, and other assistance all to the extent deemed net and interest herein conveyed; (b) for prosecuting any of said a additional applications covering said invention; (d) for filing a other priority proceedings involving said invention; and (f) for patents granted thereon, including without limitation reissues	Illy covenant and agree to cooperate with said Assignee to enable said Assignee to inveyed in the United States and foreign countries. Such cooperation by said Inventors ents, giving of testimony, execution of petitions, oaths, specifications, declarations or cessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title applications; (c) for filing and prosecuting substitute, divisional, continuing or and prosecuting applications for reissuance of any said patents; (e) for interference or relegal proceedings involving said invention and any applications therefor and any and reexaminations, opposition proceedings, cancellation proceedings, priority urt actions; provided, however, that the expense incurred by said Inventors in
 The terms and covenants of this assignm representatives, and shall be binding upon said Inventors. their 	ent shall inure to the benefit of said Assignee, its successors, assigns and other legal ir respective heirs, legal representatives and assigns.
Said Inventors hereby jointly and severa assignment, contract, or understanding in conflict herewith.	lly warrant and represent that they have not entered and will not enter into any
IN WITNESS WHEREOF, said Inventors have exe	ecuted and delivered this instrument to said Assignee as of the dates written below:
7/25/00	Madeum M. There
Date: 1/23/88	Mohammed ISLAM
· · · · · · · · · · · · · · · · · · ·	
•	
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PTO/SB10 (12/97) PIO/SBI0 (12/97)

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Patent and Trixlemark Office: U.S. DEPARTMENT OF COMMERCE

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STATEMENT CLAIMING SMALL ENTITY	STATUS	Docket Number (Optional)				
(37 CFR. 1.9(f) & 1.27(c)) - SMALL BUSINES	S CONCERN	20434-718				
Applicant, Patentee, or Identifier:	Mohammed Islam					
Application or Patent No.:	09/550,730	09/550,730				
Filed or Issued:	April 17, 2000					
Title:	BROADBAND SAGNAC RAMAN AMPLIFIERS	AND CASCADE LASERS				
I hereby state that I am						
The survey of the small husiness concern	identified below empowered to act on behalf of the concern identified	below				
NAME OF SMALL BUSINESS CONCERN	XTERA COMMUNICATIONS, INC.					
ADDRESS OF SMALL BUSINESS CONCERN	5800 Granite Parkway, Suite 330, Plano, TX 7502	4				
I hereby state that the above identified small paying reduced fees to the United States Patent and Tra not exceed 500 persons. For purposes of this statement the concern of the persons employed on a full-time, par affiliates of each other when either, directly or indirectly the power to control both. I hereby state that rights under contract or late the invention described in:	(1) the number of employees of the dashess conserve	ods of the fiscal year, and (2) concerns are le other, or a third party or parties controls or has				
	- as listed above					
the specification filed herewith with titl	e as listed above					
the application identified abovethe patent identified above						
invention must file separate statements as to their statu would not qualify as an independent inventor under 37 business concern under 37 CFR 1.9(d), or a nonprofit	(PR 1.9(C) II that below into the invention, or or	al, concern, or organization having rights in the neld by any person, other than the inventor, who any concern which would not qualify as a small				
no such person, concern, or organization		and the second second				
each such person, concern, or organiza	tion is listed below.					
NAME OF SMALL BUSINESS CONCERN		·				
ADDRESS OF SMALL BUSINESS CONCERN						
entities (37 CFR 1.27).	ication or patent, notification of any change in status	resulting in loss of entitlement to small entity				
status prior to paying, or at the time of paying, the ear longer appropriate (37 CFR 1.28(b)).	niest of the issue fee of any maintenance too go and	-				
NAME OF PERSON SIGNING Mohammed Islam						
NAME OF PERSON SIGNING						
NAME OF PERSON SIGNING TITLE OF PERSON IF OTHER THAN OWNER	Chairman					
	Chairman 5800 Granite Parkway, Suite 330, Plano, TX 750	24				

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FORM PTO-1595

RECORDATION FORM COVER SHEET PATENTS ONLY

U.S. DEPARTMENT OF COMMERCE

1-31-92

Patent and Trademark Office

To the Commissioner of Patents and Trademarks: P	lease record the attached original documents or copy thereof.			
1. Name of conveying party(ies):	2. Name and address of receiving party(ies):			
Mohammed Islam	Name: Xtera Communications, Inc.			
Additional name(s) of conveying party(ies) attached?	Street Address: 5800 Granite Parkway			
☐ Yes ⊠ No	Suite 300			
3. Nature of conveyance:	City/State/Zip: Plano, TX 75024			
Assignment Merger Security Agreement Change of Name	Additional name(s) & address(es) attached?			
Other	☐ Yes ⊠ No			
Execution Date: <u>07/25/2000</u>				
Application number(s) or patent number(s): 09/550,730 frihis document is being filed together with a new application				
A. Patent Application No.(s): 09/550,730	B. Patent No.(s):			
Additional numb	ers attached? Yes No			
Additional numb Name and address of party to whom correspondence concerning document should be mailed:	Total number of applications and patents involved: [1]			
Name: Paul Davis Internal Address: FH 1-2 Wilson Sonsini Goodrich & Rosati 650 Page Mill Road Palo Alto, CA 94304-1050	7. Total fee (37 CFR 3.41)			
□ Palo Alto, CA 94304-1050□ □□	8. Deposit account number: 23-2415 (Attorney Docket No.: 24034-718)			
DO NOT U	ISE THIS SPACE			
9. Statement and signature. To the best of my knowledge and belief, the foregoing in the original document.	formation is true and correct and any attached copy is a true copy of			
Paul Davis, Reg No. 29,294	2 1 <u>7/31/0</u>			
Name of Person Signing Total nu	Signature Date Uniform Date Date Date Date Date Date			
Total III	ander of pages metaling cover sheet, attachments, and document. [2]			



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ASSIGNMENT OF APPLICATION

Whereas, the undersigned:

1. ISLAM, Mohammed N. 907 Twin Creeks Drive Allen, TX 75013

hereinafter termed "Inventors", have invented certain new and useful improvements in

BROADBAND SAGNAC RAMAN AMPLIFIERS AND CASCADE LASERS for which an application for United States Patent was filed on April 17, 2000, Application No. 09/550,730

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for which an application for United States Patent was med on, and for which an application for a United States Patent was executed on, and for which an application for a United States Patent was executed on, and
X 101 Winds and Tribed States Patent was executed on and
and ich an application for a United States I desired
Tor Which an approved and Plano, TX 75024,
WHEREAS, Xtera Communications, Inc., a corporation, having a place of business at 5800 Granite Parkway, Suite 300, Plano, TX 75024. Whereinaster termed "Assignee"), is desirous of acquiring the entire right, title and interest in and to said application and the invention disclosed (hereinaster termed "Assignee"), is desirous of acquiring the entire right, title and interest in and to said application and the inventions (all (hereinaster termed "Assignee"), is desirous of acquiring the entire right, title and interest in and to said application and the inventions (all entered) and the said embedding the invention, heretofore conceived, made or discovered jointly or severally by said Inventors (all embedding the invention) and the invention (hereinaster inventor's certificates and other forms of protection (hereinaster inventor's certificates).
having a place of business at 2000 of the invention disclosed
Communications, Inc., a corporation, natures and interest in and to said application and the sai
WHEREAS, Xtera Communications, Inc., a corporation, naving a piece in the property of the entire right, title and interest in and to said application and the inventors (all (hereinafter termed "Assignee"), is desirous of acquiring the entire right, title and interest in and to said application and inventors (all therein, and in and to all embodiments of the invention, heretofore conceived, made or discovered jointly or severally by said Inventors (all therein, and in and to all embodiments of the invention), and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter therein), and in any the several said invention"), and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter therein).
With the designee) is desirous of acquiring the consequent made or discovered jointy of several parties (hereinafter
Chereinafter termed Assigned 7 - 4 she invention, heretofore conceived, hands the invention heretofore conceived, hands the series and other forms of protection (heretofore conceived, hands
tie and to all embodiments of the inventors, and all natents, inventors certificates the
therein, and in and to an one discounting and in and to any and an patental
(hereinafter termed "Assignee"), is desirous of acquiring the entire rigin, the discovered jointly or severally by said inventors (and thereinafter termed "Assignee"), is desirous of acquiring the entire rigin, and in and to all embodiments of the invention, heretofore conceived, made or discovered jointly or severally by said inventors (and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter termed "said invention"), and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter termed "said invention"), and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter termed "said invention"), and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter termed "said invention"), and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter termed "said invention"), and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter termed "said invention"), and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter termed "said invention"), and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter termed "said invention"), and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter termed "said invention"), and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter termed "said invention").
collectively licicitates.

termed "patents") thereon granted in the United States and foreign countries. NOW, THEREFORE, in consideration of good and valuable consideration acknowledged by said Inventors to have been received in full

- Said Inventors do hereby sell, assign, transfer and convey unto said Assignee the entire right, title and interest (a) in and to said from said Assignee: application and said invention; (b) in and to all rights to apply for foreign patents on said invention pursuant to the International Convention for the application and said divention, (b) in and to an rights to apply for foreign patents on said invention parameters and all patents granted on said invention in the Protection of Industrial Property or otherwise; (c) in and to any and all applications filed and any and all patents granted on said invention in the United States or any foreign country, including each and every application filed and each and every patent granted on any application which is a divisional, substitution, continuation, or continuation-in-part of any of said applications; and (d) in and to each and every reissue or extensions of any of said patents.
- Said Inventors hereby jointly and severally covenant and agree to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right, title and interest herein conveyed in the United States and foreign countries. Such cooperation by said Inventory enjoy to the function of pertinent facts and documents, giving of testimony, execution of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title outer papers, and outer assistance as to the extent declined necessary or destrable by said Assignee (a) for percenting in said Assignee the right and prosecuting substitute, divisional, continuing or and interest herein conveyed; (b) for prosecuting any of said applications; (c) for filing and prosecuting substitute, divisional, continuing or and microst notions covering said invention; (d) for filing and prosecuting applications for reissuance of any said patents; (e) for interference of additional applications covering said invention; (d) for filing and prosecuting applications for reissuance of any said patents; (e) for interference of any said patents. other priority proceedings involving said invention; and (f) for legal proceedings involving said invention and any applications therefor and any patents granted thereon, including without limitation reissues and reexaminations, opposition proceedings, cancellation proceedings, priority patents granted uncreon, including without immunon recourse and recommunity, opposition proceedings, cancertation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that the expense incurred by said Inventors in providing such cooperation shall be paid for by said Assignee.
- The terms and covenants of this assignment shall inure to the benefit of said Assignee, its successors, assigns and other legi representatives, and shall be binding upon said Inventors, their respective heirs, legal representatives and assigns.
- Said Inventors hereby jointly and severally warrant and represent that they have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

IN WITNESS WHEREOF, said Inventors have executed and delivered this instrument to said Assignee as of the dates written below

Mohammed ISLAM